What is claimed is:

1. A method for assessing valvular dysfunction comprising:

providing a baseline data of Formation number (Fn) from healthy persons;

measuring a patient's Fn; and

comparing the measured Fn to said baseline data so as to obtain a differential Fn, wherein the differential Fn is indicative of the valvular dysfunction.

2. The method of claim 1, wherein the Formation number is defined as a non-dimensional parameter calculated from an equation of $Fn = T \times \bar{U} / Dm$, wherein T is a major diastolic filling period, $\bar{U}$ is an average velocity during a diastolic filling period, and Dm is an equivalent diameter of a valvular annulus.

3. The method of claim 1, wherein the valvular dysfunction is dilated cardiomyopathy (DCM).

4. The method of claim 1, wherein the valvular dysfunction is selected from a group consisting of hypertrophic cardiomyopathy, ischemic cardiomyopathy, and restrictive cardiomyopathy.

5. The method of claim 1, wherein the valvular dysfunction is atrial fibrillation.

6. The method of claim 1, wherein the Fn is measured by using a noninvasive procedure of ultrasound scanning.

7. The method of claim 1, wherein the Fn is measured by using a noninvasive procedure of MRI (magnetic resonance imaging) scanning.

8. The method of claim 1, wherein the Fn is measured by using a noninvasive procedure of an electromagnetic imaging technique.

9. The method of claim 1, wherein the valvular dysfunction is ventricular dysfunction.

10. A method for assessing progress of valvular dysfunction of a patient comprising:

providing a baseline data of Formation number (Fn) from said patient;

measuring a patient's Fn over time; and

comparing the measured Fn to said baseline data so as to obtain a differential Fn, wherein the differential Fn is indicative of the progress of the valvular dysfunction.

11. The method of claim 10, wherein the valvular dysfunction is selected from a group consisting of dilated cardiomyopathy, hypertrophic cardiomyopathy, ischemic cardiomyopathy, and restrictive cardiomyopathy.

12. The method of claim 10, wherein the valvular dysfunction is atrial fibrillation.

13. The method of claim 10, wherein the Fn is measured by using a noninvasive procedure of ultrasound scanning.

14. The method of claim 10, wherein the Fn is measured by using a noninvasive procedure of MRI (magnetic resonance imaging) scanning.

15. The method of claim 10, wherein the Fn is measured by using a noninvasive procedure of an electromagnetic imaging technique.

16. The method of claim 11, wherein the valvular dysfunction is ventricular dysfunction.

17. A system for assessing the valvular functions of a patient after a cardiac operation comprising:

providing a baseline data of Formation number (Fn) from said patient before said operation;

measuring a patient's Fn intermittently after said operation; and

comparing the measured Fn to said baseline data so as to obtain a differential Fn, wherein the differential Fn is indicative of effectiveness of the operation.

18. The method of claim 17, wherein the cardiac operation is selected from a group consisting of valve replacement, annuloplasty ring replacement, valve repair, annular tissue shrinkage, and percutaneous annulus repair.

19. The method of claim 17, wherein the Fn is measured by using a noninvasive procedure of ultrasound scanning.

20. The method of claim 17, wherein the Fn is measured by using a noninvasive procedure of MRI (magnetic resonance imaging) scanning.

21. The method of claim 17, wherein the Fn is measured by using a noninvasive procedure of an electromagnetic imaging technique.